UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,723	02/21/2007	Julie Marie Wichert	70252/UST	2197
26748 7590 09/08/2009 SYNGENTA CROP PROTECTION , INC. PATENT AND TRADEMARK DEPARTMENT 410 SWING ROAD			EXAMINER	
			NWAONICHA, CHUKWUMA O	
GREENSBOR(			ART UNIT	PAPER NUMBER
			1621	
			NOTIFICATION DATE	DELIVERY MODE
			09/08/2009	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

department-gso.patent@syngenta.com

	I	I		
	Application No.	Applicant(s)		
	10/573,723	WICHERT ET AL.		
Office Action Summary	Examiner	Art Unit		
	CHUKWUMA O. NWAONICHA	1621		
The MAILING DATE of this communication app	pears on the cover sheet with the c	orrespondence address		
Period for Reply				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period v  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status				
Responsive to communication(s) filed on <u>30 AI</u> This action is <b>FINAL</b> . 2b) ☐ This     Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro			
Disposition of Claims				
<ul> <li>4)  Claim(s) 1-15 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdraw</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-15 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or</li> </ul>	vn from consideration.			
Application Papers				
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	epted or b) objected to by the I drawing(s) be held in abeyance. See ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.				
Attachment(s)  1) \( \sum \) Notice of References Cited (PTO-892)  2) \( \sum \) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)			
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P			

Application/Control Number: 10/573,723 Page 2

Art Unit: 1621

### **DETAILED ACTION**

#### **Current Status**

- 1. Claims 1-15 are pending in the application.
- 2. This action is responsive to Applicants' Remarks of 30 April 2009.
- 3. Receipt and entry of Applicants' amendment is acknowledged.
- 4. The obviousness-type double patenting rejection of claims 1-5 as being unpatentable over claims 1-8 of copending Application No. 10/598,993 in view of Benke et al. is maintained for the reason given in the previous Office Action dated 04/15/2008. Applicants' claims still read on claims 1-8 of copending Application No. 10/598993. The formation of enolate is an inherent property of ketones in acidic or basic solution at certain temperature, and the recitation of enolate is not a patentable distinction or modification **absent** a showing of criticality.
- 5. The rejection of claims 1-15 is maintained for the reasons set forth in the previous Office Action dated 12/12/2008.

Applicants' arguments and amendments filed 30 April 2009 have been fully considered but they are not persuasive because Applicants claimed process is obvious in view of the prior art references cited. Applicants' argument is based on the fact the prior art references cited do not recite enolate in their process. Applicants should know that the formation of enolate is an inherent property of ketones in acidic or basic solution. When ketones are in acidic or basic solution enolate or tautomerism exists. US 6,218,579 teach a process wherein acid is employed in the purification process, see column 10, example 9. According to Wikipedia, the free encyclopedia; a compound

containing a carbonyl group (C=O) is normally in rapid equilibrium with an enol tautomer, which contains a pair of doubly bonded carbon atoms adjacent to a hydroxyl (-OH) group, C=C-OH. Therefore, Applicants reciting Keto-enol tautomerism of carbonyl compounds that leads to enolate formation under acidic or basic condition is not a patentable distinction or modification. The prior art references cited teach the oxidation of NMST to NMSBA, conversion of NMSBA to NMSBC followed by reacting cyclohexanedione with NMSBC to produce the mesotrione as claim by Applicants.

#### Title of the Invention

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

## Specification

The abstract of the disclosure is objected to because it does not describe the subject matter. Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper content of an Abstract of the Disclosure.

In chemical patent abstracts for compounds or compositions, the general nature of the compound or composition should be given as well as its use, e.g., "The compounds are of the class of alkyl benzene sulfonyl ureas, useful as oral anti-diabetics." Exemplification of a species could be illustrative of members of the class. For processes, the type reaction, reagents and process conditions should be stated, generally illustrated by a single example unless variations are necessary.

Complete revision of the content of the abstract is required on a separate sheet.

THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

Application/Control Number: 10/573,723 Page 4

Art Unit: 1621

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chukwuma O. Nwaonicha whose telephone number is 571-272-2908. The examiner can normally be reached on Monday thru Friday, 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Sullivan can be reached on 571-272-0779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Chukwuma O. Nwaonicha/ Examiner, Art Unit 1621

/Daniel M Sullivan/ Supervisory Patent Examiner, Art Unit 1621